RESPONSE TO COMMENTS

Response to U.S. Environmental Protection Agency Comments on the Draft-Final Site Investigation Report Range 23A, Multipurpose Range, Parcel 109(7)/152Q-X Fort McClellan, Calhoun County, Alabama October 2003

Comments from Doyle T. Brittain, Senior Remedial Project Engineer, U.S. Environmental Protection Agency, Region 4, dated September 12, 2002.

Comment 1: **Page ES-1 first paragraph. The purpose for a Site Investigation is to determine the presence or absence of a CERCLA release. It is not to collect data for risk assessment purposes.**

Response 1: Comment noted.

Comment 2: **Page ES-1. Contaminants exceeding screening levels, e.g. acetone and thallium, are identified but are dismissed as being probably laboratory contaminants and probably not being having adversely impacted the environment. Therefore, EPA recommends that the nature and extent of contamination in the environment and laboratory artifacts, if any, be clearly determined before any risk management decisions are made.**

Response 2: Comment noted.

Comment 3: **Page ES-2 and elsewhere. The statement is made that *IT recommends "No Further Action" and unrestricted land reuse with regard to hazardous, toxic, and radioactive waste at Range 23A, Multipurpose Range, Parcel 109(7)/152Q-X.* This statement is disconcerting to EPA. Why would such a statement be made? The transmittal letter says that *the BCT agreed to "No Further Action" and unrestricted land reuse with regard to HTRW at this site.* Why would the purpose in the transmittal letter be different from that in the report? No information has been brought to EPA's attention that toxic (under the EPA regulatory definition of toxic) or radioactive substances have been handled at this site. The only substances that EPA is aware of having been handled at this site fit the EPA regulatory definition of hazardous. The subject report deals only with hazardous substances. Based on the information brought to EPA's attention, the following two comments are made. If substances have been used that fit the EPA regulatory definition of a toxic or radioactive substance, EPA requests that they be brought to our attention. If not, EPA asks that such statements not be included in this or any other document regarding environmental investigation and remediation at Fort McClellan.**

Response 3: Comment noted. The purpose in the transmittal letter was *not* different than that presented in the report. For the reviewer's information, "HTRW" is the acronym for "hazardous, toxic, and radioactive waste." With regard to the last part of the comment, the text in the Executive Summary and Chapter 6.0 was revised to state "...with regard to *CERCLA-related hazardous substances*..."

Comment 4: **<u>Page 1-4, Line 11</u>. This line lists 3 training areas (non-electric, electric, and MDI). The remainder of this paragraph and the next two paragraphs list these training areas in a different order (electric, MDI, and non-electric). This inconsistency is confusing. Both listings should be in the same order.**

Response 4: Agree. The text was revised per comment.

Comment 5: **<u>Page 5-2, Line 14</u>. The paragraph which begins on this line lists metals which exceeded background concentrations. For selenium and zinc, the locations where the exceedances occurred are listed. However, for arsenic, the only location identification listed is "at four locations". The arsenic exceedance locations should be listed.**

Response 5: Agree. The text was revised per comment.

Comment 6: **<u>Pages 5-4 and 5-5</u>. These pages state that surface water and sediment concentrations were compared to recreational site user SSSLs. However, line 19 on Page 6-1 states that analytical results were compared to residential human health SSSLs to determine if the site is suitable for unrestricted reuse. If the surface water and sediment data were compared to recreational site user SSSLs, the site cannot be cleared for unrestricted reuse. For this to be possible, the surface water and sediment data must be compared to residential human health SSSLs.**

Response 6: Agree. A sentence was added to Sections 5.4 and 5.5 explaining that the assumptions for residential and recreational site user exposure to surface water and sediment are identical.

Response to Alabama Department of Environmental Management Comments on the Draft-Final Site Investigation Report Range 23A, Multipurpose Range, Parcel 109(7)/152Q-X Fort McClellan, Calhoun County, Alabama October 2003

Comments from Stephen A. Cobb, Chief, Governmental Hazardous Waste Branch, Land Division, dated September 24, 2003.

Comment 1: **Page ES-1, first paragraph. The purpose of a Site Investigation is to determine the presence or absence of a CERCLA release. It is not to collect data for risk assessment purposes. Please revise the text.**

Response 1: Comment noted. The sentence in question was revised per comment.

Comment 2: **Page ES-1. Fort McClellan reported that two contaminants exceeded screening levels. Acetone was detected in one of four groundwater samples at an estimated concentration of 0.72 mg/L, exceeding the site-specific screening level (0.16 mg/L). Thallium was detected in three of six surface water samples at concentrations (3.7E-03 mg/L, 9.18E-03 mg/L, and 4.0E-03 mg/L) that exceeded the site-specific screening level (1.02E-03 mg/L) and background level (2.49E-03 mg/L) in all three samples and that also exceeded the ecological screening level (4.0E-03 mg/L) in two samples. Fort McClellan dismissed both acetone and thallium as potential constituents of concern (COCs) because the Army believes the parameters are laboratory contaminants and that they therefore are not adversely impacting the environment. ADEM concurs with Fort McClellan's decision to eliminate acetone as a potential COC, based on the low level of the exceedence detected in only one of four groundwater monitoring wells sampled, previous laboratory contaminant trends, and the absence of an acetone source at Range 23A. However, to evaluate the significance of thallium contamination at Range 23A, ADEM recommends that Fort McClellan perform a multi-tiered screening process, as referenced in Fort McClellan's May 2003 document: *Background Screening Protocol for Fort McClellan, Technical Memorandum for Selected Site-Related Chemicals for Human Health and Ecological Risk Assessments.***

Response 2: Comment noted. Site metals data were re-evaluated in accordance with the new background screening protocol agreed to by the BCT in March 2003. The three-tiered process consists of statistical testing and geochemical evaluation to select site-related metals. The background screening methodology is described in the technical memorandum "Selecting Site-Related Chemicals for Human Health and Ecological Risk Assessments for FTMC: Revision 2," (Shaw Environmental, Inc., 2003).

Comment 3: **<u>Page 5-2, Line 14.</u> The text states that arsenic and two metals (selenium and zinc) exceeded background concentrations. For selenium and zinc, the locations where the exceedences occurred are presented. However, the specific locations where arsenic exceedences occurred are not presented. ADEM and EPA request that these locations also be present.**

Comment 3: Agree. The text was revised per comment.

Response 4: **<u>Tables 5-4 and 5-5.</u> Fort McClellan indicates that surface water and sediment concentrations were compared to site specific screening levels (SSSLs) for a recreational site user. However, line 19 on Page 6-1 presents contradictory information, stating that analytical results were compared to residential human health SSSLs to determine if the site is suitable for unrestricted reuse. For the site to be cleared for unrestricted reuse the surface water and sediment data must be compared to residential human health SSSLs.**

Comment 4: Comment noted. The assumptions for residential and recreational site user exposure to surface water (and sediment) are identical. A sentence was added to Sections 5.4 and 5.5 for clarification.

Response to National Guard Bureau Comments on the
Draft-Final Site Investigation Report
Range 23A, Multipurpose Range, Parcel 109(7)/152Q-X
Fort McClellan, Calhoun County, Alabama
October 2003

Comments from Larry Lumeh, Project Manager (CCJM) dated October 3, 2002.

Summary

The level of effort consisted of the collection and analysis of 11 surface soil samples; 11 subsurface soil samples; 6 surface water samples; 6 sediment samples, and 4 groundwater samples. The locations and numbers of samples were based on the results of previous investigations (CHPPM, 1996 and CH2MHILL, 1997 and 1999). The results of these investigations suggested the presence of volatile organic compounds (VOCs), semi-volatile organic compounds (SVOCs), heavy metals, and explosives in the environment.

The analytical results of this investigation indicate that some contamination is present in all environmental media. Heavy metals, particularly arsenic, iron, thallium and manganese seem to be very prevalent, and in concentrations higher than the site-specific screening levels (SSSLs), the ecological screening values (ESVs), and the background levels. Similarly, several VOCs, SVOCs and explosive compounds were detected in the subsurface soils, surface, sediment and groundwater samples. Although the levels of contamination detected in some of the samples were in excess of their respective SSSLs, ESVs, and background levels, they were all within the range of background values developed by SAIC (1998).

Comment 1: **Considering that the site is going to be used for the same purpose, as it has always been (i. e. a range), the screening of the analytical results using SSSLs, ESVs, and established background level is acceptable as a preliminary decision making tool. However, considering that this range is also used for hunting and fishing, and that the wildlife is usually consumed, it will be prudent to conduct a preliminary ecological risk assessment- particularly because of the high levels of some heavy metals and explosive in the soil and surface water samples.**

Response 1: Comment noted. A preliminary ecological risk assessment was performed and was included in the revised report.